CLAIMS:

1.   (cancelled)

2.   (currently amended) A software agent <u>stored on a computer-readable medium, the software agent being</u> for a party conducting electronic trading<u> and</u> comprising<u>:</u>

> (a) a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting <u>respective</u> qualitative attributes for a part of a bid into numerical values<u> representing the qualitative attributes</u> and a weighting factor for each part of a bid<u>;</u>
>
> (b) a transaction engine responsive to the commercial situation or state of the party to select an optimal negotiation profile appropriate to that situation or state;
>
> (c) a negotiation engine driven by the transaction engine that is able to generate bids and counter bids and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not; and
>
> (d) means, adapted to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.

3.   (currently amended) A method of performing automated reverse auction on an electronic network using software agents for buyers and sellers wherein the software agent for each buyer and each seller comprises a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting qualitative attributes for a part of a bid into numerical values <u>representing the qualitative attributes</u> and a weighting factor for each part of a bid; a transaction engine responsive to the commercial situation or state of the party to select an optimal negotiation profile appropriate to that situation or state; a negotiation engine driven by the transaction engine that is able to generate bids and counter bids and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not; and means adapted to

cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.

4.   (cancelled)

5.   (currently amended) A method of automated bi-lateral negotiation in which each buyer is represented by a software agent and each seller is represented by a software agent, the buyers' agents co-operate to produce a call for proposal to purchase collectively from one or more seller wherein the software agent for each buyer and each seller comprises a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting qualitative attributes for a part of a bid into numerical values representing the qualitative attributes and a weighting factor for each part of a bid; a transaction engine responsive to the commercial situation or state of the party to select an optimal negotiation profile appropriate to that situation or state; a negotiation engine driven by the transaction engine that is able to generate bids and counter bids and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not;   and means adapted to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.

6.   (cancelled)

7.   (cancelled)

8.   (original) A method according to Claim 5, comprising the use of an intermediate software agent between the buyers and the or each seller, for negotiating a contract between the or each seller and the collective buyers.

9.   (previously presented) A method according to Claim 6, in which each software agent comprises a transaction engine; a negotiation engine driven by the transaction engine; and a store of a plurality of negotiation profiles; and means responsive to the commercial situation or state of the party to select an optimal negotiation profile appropriate to that situation or state, and to cause the transaction

engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.

10. (currently amended) An intermediate re-selling software agent stored on a computer readable medium, the intermediate reselling software agent being for use on an electronic network for negotiating contracts between at least one buyer and at least one seller, by purchasing from a seller and re-selling it to a buyer the intermediate re-selling software agent comprising:

> (a) a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting qualitative attributes for a part of a bid into numerical values representing the qualitative attributes and a weighting factor for each part of a bid;

> (b) a transaction engine; responsive to the commercial situation or state of the party to select an optimal negotiation profile appropriate to that situation or state;

> (c) a negotiation engine driven by the transaction engine that is able to generate bids and counter bids and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not; and

> (d) means adapted to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.

11. (cancelled)

12. (currently amended) An intermediate negotiation system for e-commerce comprising multiple software agents capable of being engaged by buyers and/or sellers, and an interface for negotiating contracts between respective agents of at least one buyer and at least one seller wherein each software agent comprises

> (a) a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting qualitative attributes for a part of a bid into numerical values representing the qualitative attributes and a weighting factor for each part of a bid;

(b) a transaction engine responsive to the commercial situation or state of the party to select an optimal negotiation profile appropriate to that situation or state;

(c) a negotiation engine driven by the transaction engine that is able to generate bids and counter bids and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not; and

(d) means adapted to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.

13.   (original) An intermediate negotiation system according to Claim 12, arranged to conduct an automated reverse auction on an electronic network using software agents for buyers and sellers.

14.   (cancelled)

15.   (previously presented) A system according to Claim 27, in which each software agent is a component of a distributed architecture.

16.   (original) A system according to Claim 12, in which each software agent is a component of a distributed architecture.

17.   (original) A method according to Claim 3, in which each software agent is a component of a distributed architecture.

18.   (original) A method according to Claim 5, in which each software agent is a component of a distributed architecture.

19.   (original) A software agent according to Claim 2, in which the negotiation engine is a component of a distributed architecture.

20.   (original) An intermediate re-selling software agent according to Claim 10, which is a component of a distributed architecture.

21.   (original) An intermediate negotiation system according to Claim 12, which is a component of a distributed architecture.

22.   (previously presented) A system according to Claim 27, in which the software is implemented as FIPA open source.

23.   (previously presented) A communications network comprising a system according to Claim 27.

24.   (original) A communications network according to Claim 23, in which the network consists of the Internet.

25.   (previously presented) A computer program for creating a system according to Claim 27.

26.   (original) A computer program for creating a software agent according to Claim 2.

27.   (currently amended) A system for performing automated reverse auction comprising:

    (a) a first software agent, the first software agent comprising:

        (i)   a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting qualitative attributes for a part of a bid into numerical values <u>representing the qualitative attributes</u> and a weighting factor for each part of a bid;

        (ii)   a transaction engine responsive to the commercial situation or state of the party to select the optimal negotiation profile appropriate to that situation or state;

        (iii)   a negotiation engine driven by the transaction engine that is able to generate bids and counter bids and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not; and

(iv)   control means adapted to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile, receiving a request for a service from a buyer;

the first software agent requesting negotiation for provision of the service with at least one other agent; and

the first software agent responding to a proposal for providing provision of the service from a second agent.

28.   (currently amended) A method for performing automated reverse auction comprising the steps of:

receiving a request for a service from a buyer;

a first software agent selecting an optimal negotiation profile appropriate to the commercial situation or state of the party the negotiation profile being selected from a store of a plurality of negotiation profiles each negotiation profile determining a different set of negotiation characteristics and requirements including a mapping for converting qualitative attributes for a part of a bid into numerical values representing the qualitative attributes and a weighting factor for each part of a bid;   and

initiating or conducting e-commerce negotiations using a negotiation engine programmed with the selected negotiation profile to generate bids and counter bids

and is further adapted to compute a single value for a bid by adjusting the numerical value using the weighting factor and summing the adjusted values, the single numerical value being used to determine whether to accept the bid or not, by

(a) requesting negotiation for provision of the service with at least one other agent; and

(b) responding to a proposal for providing provision of the service from a second agent.